UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK	DOCUMENT BILONIA CAL DOUG:
IN RE: METHYL TERTIARY BUTYL : ETHER ("MTBE") PRODUCTS : LIABILITY LITIGATION :	OPINION AND ORDER Master File No. 1:00-1898
This document relates to:	MDL 1358 (SAS) M21-88
County of Suffolk, et al. v. Amerada Hess : Corp. et al., 04 Civ. 5424 :	
SHIRA A. SCHEINDLIN, U.S.D.J.:	

Methyl tertiary butyl ether ("MTBE") is a gasoline additive that has

Doc. 1826

I. INTRODUCTION

leaking underground storage tanks ("USTs"). Because MTBE "dissolves and spreads readily in the groundwater... resists biodegradation, and is difficult and costly to remove from groundwater," it "has caused widespread and serious

contamination of the nation's drinking water supplies." Among those

Methyl Tertiary-Butyl Ether (MTBE): Advance Notice of Intent to Initiate Rulemaking Under the Toxic Substances Control Act to Eliminate or Limit the Use of MTBE as a Fuel Additive in Gasoline ("Advance Notice of Intent"), 65 Fed. Reg. 16,094, 16,096-97 (Mar. 24, 2000). Oil companies began adding MTBE to gasoline in order to increase its oxygen content in 1979, and increasingly used it after 1992 when federal regulations mandated the use of oxygenated gasoline

Authority ("SCWA") and the County of Suffolk, who supply drinking water to over one million people in Suffolk County from a large aquifer system that lies beneath the ground in Long Island, New York.² MTBE has been detected in over one hundred fifty of SCWA's nearly five hundred active wells, and scientists predict that other wells are threatened by contamination.³

Seeking compensatory and punitive damages, as well as other remedies, plaintiffs sued various companies in the oil industry that have manufactured, refined, marketed or distributed MTBE or gasoline containing MTBE.⁴ In their complaint, plaintiffs assert claims for (1) violation of Section

(known as reformulated gasoline or "RFG") in certain high-smog areas of the country. MTBE was intended to help reduce vehicle emissions that caused air pollution.

The Long Island aquifer system is designated by the Environmental Protection Agency ("EPA") as a "sole source aquifer" under the Safe Drinking Water Act, 42 U.S.C. §300h-3(e), which means that it is the sole or primary source of drinking water for the area.

³ See Sixth Amended Complaint, County of Suffolk, et al. v. Amerada Hess Corp. et al., 04 Civ. 5424 ("Compl.") ¶ 70.

Many of these defendants have settled with plaintiffs, thereby resolving all claims. A small number of defendants have not joined in that settlement agreement to date. These are: ExxonMobil, Lyondell Chemical Company and Equistar Chemicals LLP, Crown Central LLC, Getty Properties Corp., Giant Yorktown, Irving Oil Limited and Irving Oil Corporation, Gulf Oil

8(e) of the Toxic Substances Control Act ("TSCA"); (2) public nuisance; (3) strict liability for design defect and/or defective product; (4) failure to warn; (5) negligence; (6) private nuisance; (7) trespass; and (8) violation of the New York Navigation Law.⁵ To facilitate the jury trial of the numerous and complicated factual issues raised in the case, I ordered a bellwether trial of claims related to ten wells contaminated with MTBE. The number of wells that will be considered at trial has since grown to eighteen wells.⁶

The parties agree that all of the focus wells have been contaminated with MTBE. The issue in dispute is one of causation: Where did the MTBE in each well come from, and who bears the responsibility for its presence? Due to the unique and complicated facts of this case, the means of proving causation has been a highly contested issue.⁷ In particular, plaintiffs face two independent

Limited Partnership (GOLP), and TOTAL Petrochemicals USA.

⁵ See id. ¶ 4.

See In re Methyl Tertiary Butyl Ether ("MTBE") Prods. Liab. Litig., No. 1:00-1898, 2007 WL 1791258, at * 2 (S.D.N.Y. June 15, 2007) (finding a bellwether trial was "warranted by the sheer size of this action, the need for expeditious resolution, judicial economy, and the convenience of the Court, the jury, and the parties.").

The difficulty concerns "causation' in the sense of product/defendant identification (*i.e.*, that a given defendant caused MTBE to be produced and distributed in a manner that allowed it to reach plaintiffs' wells)" rather than

obstacles in identifying which defendant's product caused their injuries.

The first obstacle is that many of the spills and leaks of gasoline that may have caused contamination of plaintiffs' well water occurred long ago and beneath the ground. From these spills and leaks, MTBE then migrated toward the wells through water flowing beneath the ground. In many cases it is difficult for plaintiffs to identify the gasoline releases from which the MTBE contamination originated (*i.e.*, the leaking UST at a particular retailer).

The second obstacle is that the gasoline distribution system in the United States requires manufacturers to mix their products together for transportation in a common pipeline system. Because gasoline is commingled, it is impossible to identify with certainty the refiners of the gasoline released from a leaking UST.

Defendants have brought two omnibus motions for summary

whether MTBE, and not some other substance, caused the harm plaintiffs allege. *In re MTBE Prods. Liab. Litig.*, 517 F. Supp. 2d 662, 670 n.39 (S.D.N.Y. 2007) (holding that plaintiffs may not recover punitive damages if relying on a market share theory of liability). *See also In re MTBE Prods. Liab. Litig.*, 379 F. Supp. 2d 348 (S.D.N.Y. 2005) (denying defendants' motions to dismiss in numerous actions, and finding that New York courts would apply a theory of collective liability); *In re MTBE Prods. Liab. Litig.*, 447 F. Supp. 2d 289 (S.D.N.Y. 2006) (holding that plaintiffs may proceed on an alternative theory of liability if they cannot identify a make-whole defendant for a particular well).

judgment on plaintiffs' tort claims based on inability to prove causation. The first motion argues that for half of the focus wells, plaintiffs cannot prove that any particular leaking UST at a retail gas station caused the contamination of the well, and thus the companies that own those retail stations cannot be liable. Defendants further argue in that motion that the companies that manufacture, market or distribute MTBE or gasoline containing MTBE should not be liable because plaintiffs cannot prove their role in causing the harm. The second motion argues that where plaintiffs can identify the source of contamination in a well, only the owners and/or operators of the stations named by plaintiffs' expert as the source of contamination can be liable.

In addition, defendants filed a separate motion for partial summary judgment as to the Navigation Law claims, again arguing that only those companies whose spills were found by plaintiffs' expert to have caused

See Defendants' Motion for Partial Summary Judgment as to Nine Focus Wells for Which Plaintiffs Cannot Establish Causation. To avoid the use of this title, which is both cumbersome and presupposes an outcome in defendants' favor, I will refer to this motion as "Def. I."

See Defendants' Motion for Partial Summary Judgment as to Those Nine "Traditional" Causation Focus Wells for Which They Are Not Identified as the Responsible Parties. Again, for the purpose of simplicity I will refer to this motion as "Def. II."

contamination can be liable for such claims. 10

Finally, a small subset of defendants filed individual motions for summary judgment, arguing that for various reasons, their gasoline or MTBE could not have caused plaintiffs' injuries. These companies include: (1) Lyondell Chemical Company ("Lyondell") and Equistar Chemicals LP ("Equistar"), (2) Crown Central LLC ("Crown"), (3) Getty Properties Corp. ("Getty"), (4) Giant Yorktown Inc. ("Giant"), (5) Irving Oil Limited and Irving Oil Corporation ("Irving"), and (6) Total Petrochemicals USA, Inc. ("Total"). 11

For the reasons below, defendants' motions are granted in part and denied in part.

II. STANDARD FOR SUMMARY JUDGMENT

Plaintiffs' Navigation Law claims are asserted only against those defendants who are dischargers of gasoline into the environment, and the factual and legal arguments made in the Navigation Law motion are identical to those made in the second omnibus motion on the issue of causation (Def. II). They are addressed in Part V, *infra*, discussing liability of retailers alleged to have spilled gasoline.

I will refer to Defendant Crown Central LLC's Memorandum of Law in Support of Its Motion for Summary Judgment Motion as "Crown Mem." and its Reply Brief as "Crown Reply." Plaintiffs' brief in opposition will be referred to as "Pl. Opp. to Crown Mem." Citations to the other briefs filed by individual defendants will have a similar form (*e.g.*, Giant Mem., Pl. Opp. to Giant Mem., Giant Reply, etc.).

Summary judgment is appropriate "if the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to judgment as a matter of law."¹² An issue of fact is genuine "if the evidence is such that a reasonable jury could return a verdict for the nonmoving party."¹³ A fact is material when it "might affect the outcome of the suit under the governing law."¹⁴ "It is the movant's burden to show that no genuine factual dispute exists."¹⁵

In turn, to defeat a motion for summary judgment, the non-moving party must raise a genuine issue of material fact. To do so, it must do more than show that there is "some metaphysical doubt as to the material facts," and it

¹² Fed. R. Civ. P. 56(c).

Higazy v. Templeton, 505 F.3d 161, 169 (2d Cir. 2007) (quoting Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248 (1986)).

McCarthy v. Dun & Bradstreet Corp., 482 F.3d 184, 202 (2d Cir. 2007) (citing Jeffreys v. City of New York, 426 F.3d 549, 553 (2d Cir. 2005)).

Vermont Teddy Bear Co. v. 1-800 Beargram Co., 373 F.3d 241, 244 (2d Cir. 2004) (citing Adickes v. S.H. Kress & Co., 398 U.S. 144, 157 (1970)).

Higazy, 505 F.3d at 169 (quoting *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 586 (1986)).

"may not rely on conclusory allegations or unsubstantiated speculation." However, "all that is required [from a non-moving party] is that sufficient evidence supporting the claimed factual dispute be shown to require a jury or judge to resolve the parties' differing versions of the truth at trial." ¹⁸

In determining whether a genuine issue of material fact exists, the court must construe the evidence in the light most favorable to the non-moving party and draw all justifiable inferences in that party's favor. However, "[i]t is a settled rule that '[c]redibility assessments, choices between conflicting versions of the events, and the weighing of evidence are matters for the jury, not for the court on a motion for summary judgment." Summary judgment is therefore inappropriate "if there is any evidence in the record that could reasonably support

Jeffreys, 426 F.3d at 554 (quoting Fujitsu Ltd. v. Federal Express Corp., 247 F.3d 423, 428 (2d Cir. 2002)).

¹⁸ McClellan v. Smith, 439 F.3d 137, 144 (2d Cir. 2006) (quoting First Nat'l Bank of Ariz. v. Cities Serv. Co., 391 U.S. 253, 288-89 (1968)).

¹⁹ See Allstate Ins. Co. v. Hamilton Beach/Proctor Silex, Inc., 473 F.3d 450, 456 (2d Cir. 2007) (citing Stern v. Trustees of Columbia Univ., 131 F.3d 305, 312 (2d Cir. 1997)).

²⁰ McClellan, 439 F.3d at 144 (quoting Fischl v. Armitage, 128 F.3d 50, 55 (2d Cir. 1997)). Accord Anderson, 477 U.S. at 249.

a jury's verdict for the non-moving party.""21

III. CAUSATION

The requirement that the defendant's actions must be the cause of the plaintiff's injury is common in the law and applies to all of plaintiffs' claims other than TSCA.²² At issue here is whether plaintiffs' evidence could support a reasonable jury's finding that defendants caused the alleged harm under either traditional or alternative theories of causation, and in what circumstances is it appropriate to allow plaintiffs to prove causation through the use of alternative theories of liability.

A. Traditional and Alternative Methods of Proving Causation

Tort liability usually depends on proof that a defendant's conduct was both the factual cause and the proximate cause of a plaintiff's injury.²³ For

American Home Assurance Co. v. Hapag Lloyd Container Linie, GmbH, 446 F.3d 313, 315 (2d Cir. 2006) (quoting Marvel Characters, Inc. v. Simon, 310 F.3d 280, 286 (2d Cir. 2002)).

[&]quot;The notion that causal connection between agency and harm must be established is . . . often implied even when the word ["cause"] is not used." Antony Honoré, "Causation and the Law," *Stanford Encyclopedia of Philosophy* (2005), http://plato.stanford.edu/entries/causation-law/. The parties do not distinguish among the different claims when discussing causation in their briefs.

See Restatement (Second) of Torts § 433 (1977). For an academic discussion, see Richard W. Wright, Causation in Tort Law, 73 CAL. L. REV. 1735

example, in a negligence claim, "[t]o carry the burden of proving a prima facie case, the plaintiff must generally show that the defendant's negligence was a substantial cause of the events which produced the injury."²⁴ The substantial factor standard for causation, adopted in New York, recognizes that often many acts can be said to have caused a particular injury, and requires only that defendant's actions be a substantial factor in producing the injury.²⁵ A plaintiff need not eliminate every other possible cause, and the fact "[t]hat another possible cause concurs with defendant's negligent act or omission to produce an injury does not relieve defendant from liability."²⁶

^{(1985) (}discussing causation as the basis for imposing legal responsibility for another's harm). Causation in strict products liability claims "is determined by the prevailing rules and principles governing causation in tort." Restatement (Third) of Torts: Prod. Liab. § 15, cmt. a (1998).

Mortensen v. Memorial Hospital, 483 N.Y.S.2d 264, 269 (1st Dep't 1984). Accord Derdiarian v. Felix Contracting Corp., 51 N.Y.2d 308, 316 (1980).

See Mortensen, 483 N.Y.S.2d at 270 (citing Dunham v. Village of Canisteo, 303 N.Y. 498, 504 (1952)); see also Capicchioni v. Morrissey, 613 N.Y.S.2d 499 (3d Dep't 1994) (holding that jury instruction implying that defendant must be the sole cause of a car accident was reversible error). In strict products liability, it is the product defect or the failure to warn, rather than the defendant's conduct, that must be shown to be a substantial cause of the plaintiff's injuries. See Voss v. Black & Decker Mfg. Co., 59 N.Y.2d 102, 106 (1983).

²⁶ Mortensen, 483 N.Y.S.2d at 270

Plaintiffs usually bear the burden of proving causation, like every other element of a prima facie case, by a preponderance of the evidence. In other words, plaintiffs must show that it is more likely than not that the defendant's actions caused their injury. In addition, "identification of the exact defendant whose product injured the plaintiff is . . . generally required." "The identity of the manufacturer of a defective product may be established by circumstantial evidence." Such evidence cannot be "speculative or conjectural," it must be reasonably probable that it was defendant's product that caused the injury. 29

It is sometimes impossible to identify the exact defendant who caused the injury even though the plaintiff can establish the other elements of a prima facie case against a number of defendants. In such situations, courts have occasionally allowed plaintiffs to prove causation through alternative means, 30 such as shifting the burden to the defendants to prove that they did not cause the

Hymowitz v. Eli Lilly & Co., 73 N.Y. 2d 487, 504 (1989) (citing Morrisey v. Conservative Gas Corp., 136 N.Y.S.2d 844 (2d Dep't 1955); Prosser and Keeton, Torts § 103, at 713 [5th ed.]).

²⁸ Healey v. Firestone Tire & Rubber Co., 87 N.Y.2d 596, 601 (1996).

²⁹ *Id*. at 602.

See, e.g., In re MTBE, 517 F. Supp. 2d at 668 (clarifying that market share liability is an evidentiary method rather than an independent claim).

harm.³¹ Courts have developed various doctrines, deemed "alternative liability theories," which depart from the requirement that plaintiffs prove by a preponderance of the evidence that defendant's conduct was a substantial cause of the events which produced the injury.

B. Applicability of Causation Theories in this Case

In denying defendants' motion to dismiss in this action, I held that

New York courts would allow plaintiffs to prove their claims through an

alternative liability theory.³² Since then, much confusion has arisen regarding the
applicability of various theories of alternative liability, particularly market share
liability.³³

Alternative liability, as it was first explained in the seminal case of *Summers v. Tice*, 33 Cal. 2d 80 (1948), provides that the burden of proof is shifted to the defendant to prove that it did not cause the injury, where each defendant acted tortiously, but there is uncertainty as to which of the defendants caused the injury.

³² See In re MTBE, 379 F. Supp. 2d at 425.

The doctrine of market share liability was developed to provide a remedy in cases where the plaintiff alleges harm from a product that is fungible, and therefore she is unable to identify the manufacturer of the particular product she used. Under the doctrine of market share liability, the burden of proof shifts to the defendants if plaintiff establishes a prima facie case on every element of the claim except for identification of the actual tortfeasors. In that case, each defendant is severally liable for the portion of the judgment representing its share of the national market at the time of injury, unless it exculpates itself by proving it could not have made the product that caused plaintiff's harm. See Sindell v.

To some extent, the confusion is due to prior rulings in this case that were made without a fully developed evidentiary record. Plaintiffs have now submitted evidence about the gasoline distribution system, including third-party depositions of gasoline pipeline and terminal company representatives, which has shed light on how manufacturers' gasoline is commingled for transport to retail gas stations. On the basis of this evidence, as explained below, I am now able to clarify several issues with respect to alternative liability. *First*, market share liability need not be applied in this case to prove plaintiffs' claims, and indeed the theory may not even be applicable on these facts, because the product alleged to have caused the harm is undeniably a *blended* product manufactured by multiple defendants, rather than a product manufactured by a single defendant that cannot be identified.³⁴

Second, plaintiffs may rely on the commingled product theory, which this Court developed to address the particular facts of this case, to prove their

Abbott Labs., 26 Cal. 3d 588 (1980). Accord Hymowitz, 73 N.Y. 2d 487.

In the fact scenario addressed by *Sindell* and *Hymowitz*, by contrast, each pill alleged to have caused plaintiffs' injuries was manufactured by only one defendant. Indeed, in a letter dated October 2, 2007, Plaintiffs themselves represented to the Court that they did not intend to pursue their claims under market share liability.

claims against gasoline and MTBE manufacturers.³⁵ As discussed below, the commingled product theory, while still an alternative means of proving causation, is closer to traditional causation than to market share liability. Under this theory, a reasonable jury could conclude, based on the evidence in the record, that all defendants contributed to the commingled gasoline that caused contamination in plaintiffs' wells. Defendants may still exculpate themselves by showing that their product could not have been part of the commingled gasoline spilled in Suffolk County, but the burden shifts to them to do so.

Third, where a reasonable jury could conclude – under traditional causation principles – that particular gasoline spills caused the contamination in each well, summary judgment is denied for claims against the defendants responsible for those spills.³⁶ Fourth, because all entities in the chain of

Plaintiffs' claims against manufacturers of MTBE and gasoline containing MTBE allege that the manufacturers created and distributed a defectively designed product, failed to warn of the product's known dangers, negligently placed a product they knew to be dangerous into the stream of commerce, and created a public nuisance. *See* Compl. ¶¶ 214-250 (Second, Third, Fourth and Fifth Causes of Action).

These claims include product liability for design defect; negligence in the storage and handling of gasoline containing MTBE; trespass; private and public nuisance; and violation of the New York Navigation Law, which holds "dischargers" of gasoline strictly liable for damages resulting from that discharge. Plaintiffs do not argue that alternative liability theories should apply to claims against the parties responsible for spilling or leaking gasoline. *See id.* ¶ 226-254.

distribution may be liable for product liability claims,³⁷ the defendants proven to have spilled the gasoline that caused contamination in a well may be held jointly and severally liable for these claims with the defendants shown under the commingled product theory to have manufactured the gasoline that spilled. In other words, the jury's conclusion that certain defendants spilled gasoline that caused contamination in a well, and are thereby liable as *retailers* of a defective product, does not preclude the jury from also concluding that certain defendants manufactured the gasoline that was spilled, and are thereby liable as *manufacturers* of a defective product. *Fifth*, and finally, even when the jury concludes that plaintiffs have not met their burden to prove that any particular spill of gasoline caused contamination in a well, plaintiffs may still prove their claims against gasoline manufacturers under the commingled product theory.

IV. LIABILITY OF GASOLINE AND MTBE MANUFACTURERS38

^{260-270 (}Third, Fourth, Fifth, Sixth, Eighth and Ninth Causes of Action).

See Codling v. Paglia, 32 N.Y.2d 330, 338-40 (1973) (setting forth principle that a manufacturer may be liable for injuries to innocent bystanders caused by its product). Accord Bellevue South Assoc. v. HRH Const. Corp., 78 N.Y.2d 282, 290 (1991) (reasoning that "manufacturers could better sustain the losses which could be spread among all their customers"); Perillo v. Pleasant View Assoc., 739 N.Y.S.2d 504 (4th Dep't 2002).

Lyondell Chemical Company and Equistar Chemicals, both manufacturers of MTBE but not of gasoline, have brought their own summary

The parties do not dispute that gasoline containing MTBE is a fungible product, nor do they dispute that gasoline manufacturers – known as refiners – mix their products together for transportation and distribution, so that the gasoline sold at any given retail station contains the product of multiple refiners. Defendants argue that because plaintiffs cannot identify which refiners were responsible for producing the particular gallons of gasoline that were released into the environment and caused contamination in the wells, their claims against the refiners must fail. In response, plaintiffs argue that all refiner defendants contributed to all gasoline released into the environment in Suffolk County, creating a fact issue for the jury under traditional causation principles. In the alternative, plaintiffs argue that the commingled product theory and/or market share liability should shift the burden of proof to the defendants to exculpate themselves from liability.

Plaintiffs' argument that a reasonable jury could conclude, under traditional causation principles, that it was likely that *all* defendants' product was part of *every* gallon of gasoline that caused MTBE contamination, is not supported by the evidence in the record. Rather, it is likely that *some* of each defendant's

judgment motion that is addressed in Part IV.D, *infra*. The other sections in Part IV will focus only on the liability of gasoline refiners.

gasoline was spilled somewhere in Suffolk County, leading to contamination in some of the wells. Moreover, because of the blended nature of the gasoline, it is impossible to determine whose product was in any particular spill. However, defendants' argument that this impossibility is fatal to plaintiffs' claims is contrary to New York policy and precedent, and to prior rulings in this case. Instead, as explained below, the commingled product theory provides plaintiffs with a means to prove their claims against the manufacturers.

A. Background on the Pipeline System

"The name on the service station sign does not tell the whole story.

The fact that you purchase gasoline from a given company does not necessarily mean that the gasoline was actually produced by that particular company's refineries." In fact, the gasoline is almost never produced exclusively by that company's refineries. Instead, the gasoline sold at each service station in a particular area is usually the same: a blend of a large number of refiners' products, due to the complex gasoline distribution system in the United States.

The system includes various actors:

• MTBE manufacturers, who create MTBE and sell it to be blended into

Energy Information Administration ("EIA"), Primer on Gasoline Sources and Markets, http://www.eia.doe.gov/neic/experts.contactexperts.htm.

gasoline;

- gasoline refiners, who manufacture gasoline and other petroleum products from crude oil, and who blend MTBE into gasoline;
- marketers, who purchase and sell gasoline, acting as middlemen between refiners and retailers; and
- retailers, who sell gasoline to the public at service stations.

Other participants in the system include those who transport or store gasoline, such as pipeline operators, terminal owners, and jobbers, who transport gasoline from terminals to retailers. Many oil companies are vertically integrated, which means that a single company may own and operate refineries, own terminals, market gasoline, and sell gasoline to the public from retail stations that it owns or on which it places its brand. "The process of manufacturing and distributing petroleum products involves complex arrangements whereby defendants trade, barter, or otherwise exchange product for delivery throughout parts of the country."

The complex business relationships in the oil industry cannot fully be addressed here.⁴¹ Instead, this section discusses how gasoline traveled from the

⁴⁰ *In re MTBE*, 379 F. Supp. 2d at 365.

See 8/2/07 Expert Report of John B. O'Brien ("O'Brien Report"), Ex. F to Plaintiffs' Exhibits in Support of Supplemental Briefing in Opposition to Def. I ("Pl. Supp. Opp. to Def. I"), for a full discussion of petroleum product

manufacturers to the retail stations in Suffolk County from which it leaked into the soil. *First*, MTBE is manufactured and blended into gasoline at the refinery. Second, the gasoline is transported via pipeline and waterway to New York Harbor. *Third*, it is stored in primary terminals at the New York Harbor, from which it is redistributed by ship and by pipeline to secondary terminals in Long Island. *Fourth*, and finally, at Long Island secondary terminals, trucks load the gasoline from common tanks for transport to retail stations in Suffolk County.

1. Gasoline Refining

Crude oil is converted to petroleum products, including gasoline, at refineries. Many of the defendants in this case own and operate petroleum refineries. At the refinery, MTBE – which may have been manufactured by a separate petrochemical company and purchased by the refinery, or may have been manufactured at the refinery itself – is blended into the portion of gasoline that is destined for areas where oxygenated fuel is sold.

2. Pipeline Transport

Most U.S. refineries are located in the Gulf Coast, although regional refineries are scattered throughout the country. A system of underground

distribution exchanges and other business relationships.

pipelines transports gasoline from refineries to regional markets. The pipeline serving the East Coast is the Colonial Pipeline.⁴² Stretching from the Gulf of Mexico to New York Harbor, the Colonial Pipeline is the "world's largest volumerefined petroleum products pipeline system."⁴³ It includes 5,519 miles of pipeline and serves over eighty customers.⁴⁴

Refiners load gasoline and other petroleum products into the pipeline from their facilities in Texas, Louisiana, Mississippi and Alabama.⁴⁵ Volumes of gasoline are unloaded at the 267 marketing terminals along the length of the pipeline, most of which are near major population centers.⁴⁶ The Colonial Pipeline terminates at the New York Harbor in Linden, New Jersey, where there are a

See ERS Group, Report on Petroleum Products Markets in the Northeast, Prepared for the Attorneys General of Maine, Massachusetts, New Hampshire, New York, and Vermont ("ERS Report on Petroleum Products") at 20 (Sept. 2007). Although neither party cites this report, there is no reason to believe the information it contains is not accurate. The report is admissible as the report of a public agency (the Attorneys General of several states) setting forth matters observed pursuant to a duty. See Fed. R. Evid. 803(8)(B).

Colonial Pipeline Company, About Us, http://www.colpipe.com/ab_main.asp. Again, neither party cites the Colonial Pipeline website, but there is no reason to believe the very basic information cited here is not accurate.

ERS Report on Petroleum Products at 42.

See Colonial Pipeline Company, About Us, http://www.colpipe.com/ab_main.asp.

See id.

number of petroleum terminals.⁴⁷

Most gasoline shipped in the pipeline is fungible. When a refiner designates its gasoline as fungible, it is not kept separate from other refiners' gasoline but is instead mixed with all other refiners' fungible gasoline for shipment. Each refiner loading fungible gasoline into the pipeline must ensure that its product is identical according to pipeline specifications. When a company takes a volume of gasoline out of the pipeline at a terminal, it is not the same gasoline it put in, but merely an equivalent amount. As Colonial Pipeline explains, when shipping gasoline as fungible, companies unloading their product "will receive equivalent product but may not get back the actual product shipped."

See ERS Report on Petroleum Products at 44. A number of smaller pipelines, which are part of the Colonial Pipeline system, run between the various terminals in the New York Harbor and connect to the other pipelines that serve the Northeast region, the Buckeye and Sunoco piplines. See id.

Different grades of gasoline, and different petroleum products, are shipped separately in the pipeline in "batches." "On the Colonial pipeline system, for example, batches range in size from 75,000 barrels to 3.2 million barrels." *Id.* The batches are generally not physically separated, and some mixing of products often occurs at each end of a batch. *See id.*

Colonial Pipeline, Frequently Asked Questions, http://www.colpipe.com/ab faq.asp.

Some proprietary grades of gasoline are shipped as a segregated product, in which case "shippers receive the same product they injected into the system." Segregated product represents a small portion of the gasoline shipped in the pipeline, however. According to plaintiffs, "only a few gasoline products . . . were not commingled with other gasoline products – Amoco's Silver and Ultimate premium gasolines, and in the early 1990s, Mobil's proprietary premium grades and certain product refined at Exxon's Bayway facility." Sayway facility."

3. Terminals in New York Harbor and Long Island

Terminals are "the primary gateways for petroleum product distribution." The first distribution hub for gasoline sold in the New York metropolitan area, as well as much of the Northeast, is the set of primary terminals in the New York Harbor. Terminals are owned by individual companies, but like the pipeline companies the terminal owners do not own the gasoline stored at and

⁵⁰ *Id*.

Plaintiffs' Opposition to Defendants' Partial Motion for Summary Judgment as to Nine Focus Wells for Which Plaintiff Cannot Establish Causation ("Pl. Opp. To Def. I") at 17 n.9.

ERS Report on Petroleum Products at 52.

shipped from the terminal.⁵³ The primary terminals receive gasoline and other fuels from the Colonial Pipeline and from waterway shipment, store the gasoline in large tanks, and re-direct it toward secondary terminals serving regional markets.

Waterway shipments from both domestic and foreign sources represent a significant portion of supply to the New York Harbor terminals.⁵⁴
Although shipments arriving at the terminal may contain gasoline produced by a single refiner, upon arrival that gasoline is placed in the same large storage tanks as the fungible gasoline from the pipeline. Therefore, it becomes mixed with gasoline from other refiners at the terminal itself.

Thirty-one different companies own terminals in the New York City area, including many of the defendants named in this action as well as companies not named as defendants. *See id.* at 63, Table 3.8.

Domestic refineries currently supply approximately eighty-five to ninety percent of U.S. gasoline consumption. *See id.* at 26; *see also* Lawrence Kumins, *Gasoline Supply: The Role of Imports*, CRS Report for Congress, Sept. 14, 2004, at 1. Just over fifty percent of gasoline delivered to the New York harbor by waterway comes from foreign sources. *See* ERS Report on Petroleum Products at 39, Figure 2.5. A large portion of imports are gasoline components, which are then blended into gasoline by U.S. refiners. *See id.* at 4, 7. Canada is by far the most significant importer of gasoline to the U.S, and Canadian gasoline supplies a good portion of the Northeast gasoline market. *See* Kumins, *Gasoline Supply* at 7. Irving Oil, a defendant in this case, is the largest Canadian refiner. It exports "approximately 175,000 barrels of petroleum products per day to the Northeast, including 100,000 barrels of reformulated gasoline." ERS Report on Petroleum Products at 49.

From the New York Harbor terminals, gasoline is sent to secondary terminals throughout the Northeast, including terminals on Long Island where Suffolk County is located, either through the Buckeye Pipeline, an underground pipeline system serving the Northeast, or by barge. Some gasoline refined in New Jersey is also placed directly into the Buckeye Pipeline for transport to Long Island secondary terminals. Most gasoline placed in the Buckeye Pipeline has already been blended either in the Colonial Pipeline or in storage tanks at the primary terminal. Gasoline placed directly by the refiner into the Buckeye Pipeline, if designated as fungible, is mixed together with the other gasoline, which itself is already mixed.

Secondary terminals on Long Island supply all the gasoline found in Suffolk County – both at retail stations as well as non-retail customers. ⁵⁶ As with primary terminals, gasoline arriving at secondary terminals by pipeline and barge is stored in large tanks. The terminals have tanks designated for various grades of fungible gasoline, proprietary gasoline, and other petroleum products.

4. Distribution to Retail Stations

See O'Brien Report at ¶¶ 126-127. Not all primary terminals in the New York Harbor serve the Long Island secondary terminals. See id.

⁵⁶ See id.

From "racks" at the secondary terminal tanks, tanker trucks load gasoline for distribution to retail stations and other users. The trucks delivering the gasoline may be a company's branded trucks taking it to their branded stations, or they may be independent companies who contract with refiner-marketers to supply branded stations, or who supply independent, non-branded stations. ⁵⁷
Unless the truck is delivering a proprietary brand, the gasoline loaded onto each truck comes from the same tanks, which contain gasoline from various refiners mixed together.

There are approximately six hundred retail gasoline stations in Suffolk County, about eighty percent of which are branded.⁵⁸ A branded station is not necessarily owned by the company under whose brand it sells gasoline, and in Suffolk County only about forty-five percent of the branded stations are owned by the branding company.⁵⁹ The stations may be leased or run under franchise agreements, in which case independent owners of branded stations are typically required to purchase gasoline from the refiner whose brand is on the station.⁶⁰

⁵⁷ See ERS Report on Petroleum Products at 74-77.

See O'Brien Report at ¶ 128.

⁵⁹ See id.

See ERS Report on Petroleum Products at 74.

Non-branded stations also purchase gasoline from refiners at the secondary terminals, or from jobbers who purchase it from refiners and re-sell it to station owners.⁶¹ At gas stations, the trucks load the gasoline into USTs from which it is pumped into vehicles upon sale. These USTs are often the site of gasoline leaks.

B. Proof of Claims Against Manufacturers Under Traditional Causation Principles

Evidence in the record that describes the gasoline distribution system serving the New York regional market includes a report by defendants' expert John O'Brien,⁶² confidential deposition testimony from representatives of the Colonial and Buckeye pipelines,⁶³ and deposition testimony from representatives of companies that own, operate or lease six of Long Island's eight secondary terminals, most of which are also confidential.⁶⁴ This evidence illustrates that

⁶¹ See id.

See O'Brien Report, at ¶¶ 125-128, Ex. F to Pl. Supp. Opp. to Def. I.

See 1/18/08 Deposition of James Edward Brown ("Brown Dep."), Ex. I in Support of Pl. Supp. Opp. to Def. I; 1/16/08 Deposition of James V. Scandola ("Scandola Dep."), Ex. J in Support of Pl. Supp. Opp. to Def. I. This testimony is confidential pursuant to MDL 1358, Case Management Order No. 36 (Feb. 15, 2008), which applied the Court's 2004 Revised Confidentiality Order to documents, information and other evidence relating to certain terminals.

See 11/15/07 Deposition of Daniel Gianfalla, Ex. K in Support of Pl. Supp. Opp. to Def. I; 12/20/07 Deposition of David McWilliams, Ex. L in Support of Pl. Supp. Opp. to Def. I; 10/19/07 Deposition of Mario A. D'Antonio

gasoline sold in Suffolk County is supplied according to the system described above and becomes commingled in the process, making it "the joint product of all who have contributed to it along the way from refineries through pipelines and tankers to primary terminals and out again via pipelines and barges to secondary terminals."

Testimony from pipeline and terminal employees makes clear that all gasoline delivered to Suffolk County gas stations, with the exception of a few proprietary brands, was necessarily transported through the commingled distribution system described above.⁶⁶ In addition, evidence in the record, including interrogatory responses from refiner defendants⁶⁷ and confidential

^{(&}quot;D'Antonio Dep."), Ex. M in Support of Pl. Supp. Opp. to Def. I; 12/19/07 Deposition of H. Brant Brown, Ex. N in Support of Pl. Supp. Opp. to Def. I; 12/13/07 Deposition of Anthony Cassandro ("Cassandro Dep."), Ex. O in Support of Pl. Supp. Opp. to Def. I; and 1/04/07 Deposition of John Didier ("Didier Dep."), Ex. P in Support of Pl. Supp. Opp. to Def. I.

⁶⁵ Pl. Supp. Opp. to Def. I at 22.

See Brown Dep. at 64-67; Scandola Dep. at 57-58, 87; D'Antonio Dep. at 62-63; Cassandro Dep. at 23-25, 41; Didier Dep. at 41. It should be noted that not all terminals in the New York Harbor send gasoline to the Long Island terminals. See Supplemental Expert Declaration of John B. O'Brien ("O'Brien Supp. Decl."), Ex. B to Defendants' Rule 56.1 Statement in Support of Def. I, ¶ 7.

See Declarations of Refiner Defendants in Compliance with Case Management Order No. 4, Ex. C to Declaration of Carla M. Burke in Support of Plaintiffs' Opposition to Def. I.

records of barrels of gasoline placed into the pipeline and taken out of the pipeline by each refiner defendant by year from 1979 to 2003,⁶⁸ demonstrates that during certain years each refiner defendant contributed to the commingled gasoline distributed in Suffolk County.

However, even drawing all inferences in plaintiffs' favor, no reasonable jury could find, by a preponderance of the evidence, that each defendant's gasoline caused the contamination of each well. Many refiners supply the New York area – almost fifty were named as defendants in this case – and overseas companies not named as defendants also supply gasoline to the New York regional market. Because of the large number of refiners contributing product, defendants' expert opines that "no gallon of gasoline stored in, or released from, a UST in Suffolk County would ever have contained molecules from every gasoline manufacturer who made product in a particular year." There is simply no way to identify, by direct or circumstantial evidence, the refiners of the gasoline that eventually leaked from a UST.

See Confidential Barrels In/Barrels Out Charts submitted in support of Plaintiffs' Opposition to Def. I for *in camera* review.

O'Brien Supp. Decl. ¶ 7. This statement is slightly misleading, however, because most spills involved the release of many gallons of gasoline over a period of time.

C. Proof of Claims Against Manufacturers Under the Commingled Product Theory

The evidence can, however, support an inference that each defendant's gasoline containing MTBE was, at least during certain years, delivered to Suffolk County gas stations in a commingled state. A reasonable jury could conclude that most defendants' gasoline contributed to contamination in at least some of the wells at some point. To exempt defendants from liability, when plaintiffs have proven the other elements of their claims, simply because plaintiffs are unable to deconstruct the molecules of the commingled gasoline to identify the manufacturers of each gallon of spilled gasoline is unjust. To avoid such a result, New York courts have often "modif[ied] the rules of personal injury liability, in order 'to achieve the ends of justice in a more modern context' and . . . to overcome 'the inordinately difficult problems of proof' caused by contemporary products and marketing techniques."

In accordance with that policy, I have previously held that under the commingled product theory,

when a plaintiff can prove that certain gaseous or liquid products (e.g., gasoline, liquid propane, alcohol) of many refiners and manufacturers

Hymowitz, 73 N.Y.2d at 507 (quoting People v. Hobson, 39 N.Y.2d 479, 489 (1976) and Bichler v. Eli Lilly & Co., 55 N.Y.2d 571, 579-80 (1982)).